

Figure 1

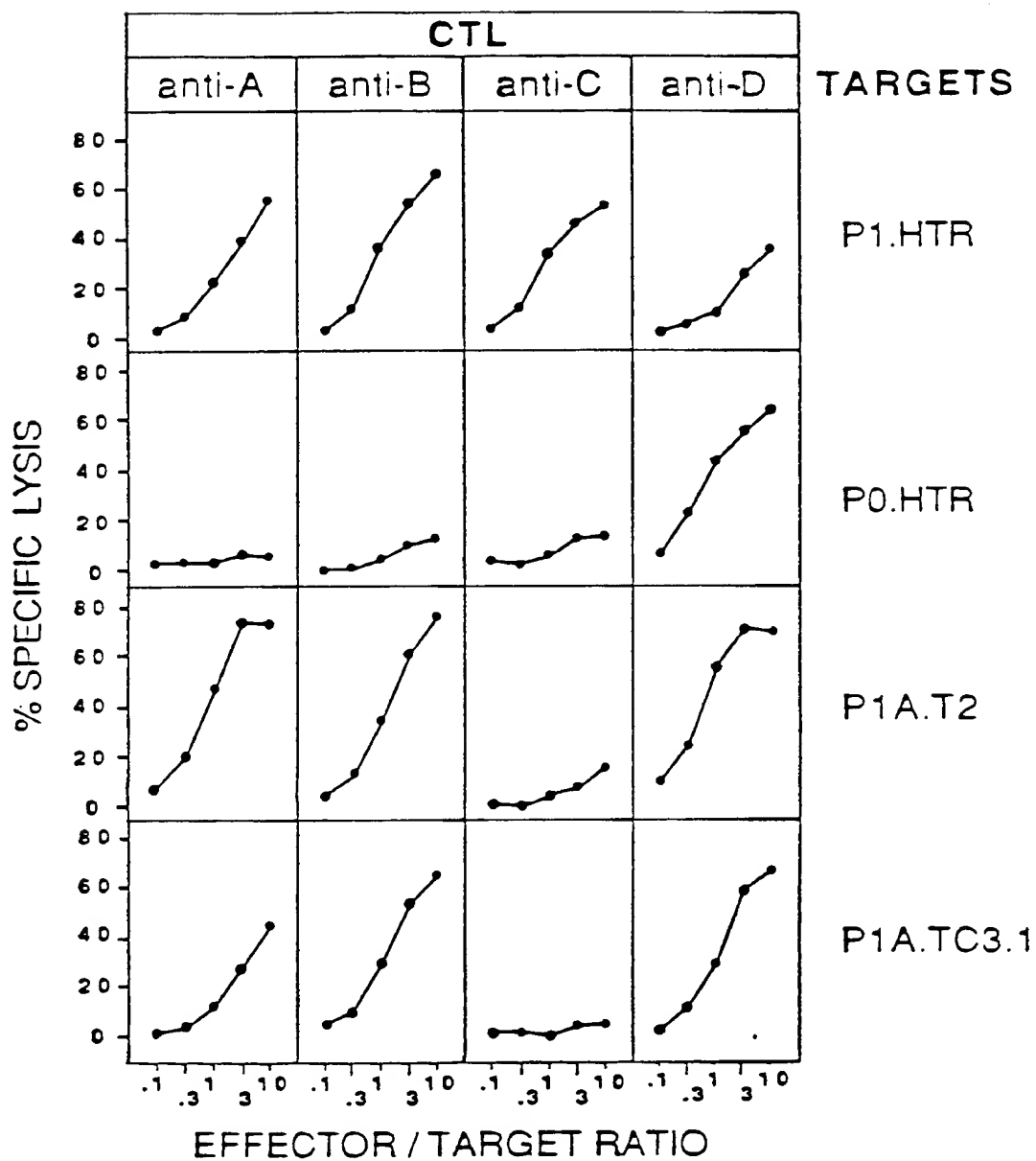
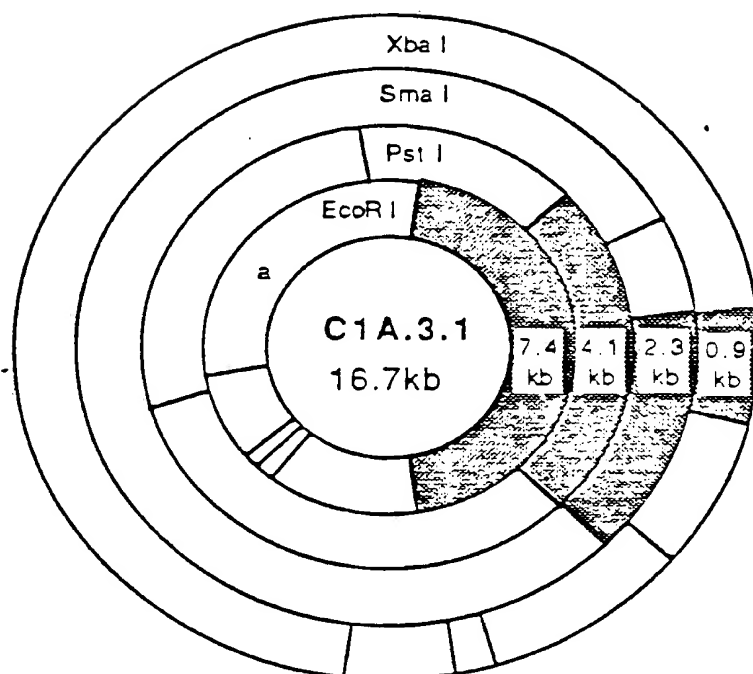


Figure 2



Transfection of restriction fragments

No. of clones expressing P815A
/ no. of HmB^r clones

| | |
|----------------------|-------|
| 4.1 kb Pst I - Pst I | 2/16 |
| 2.3 kb Sma I - Pst I | 16/96 |
| 0.9 kb Sma I - Xba I | 22/96 |

Figure 3

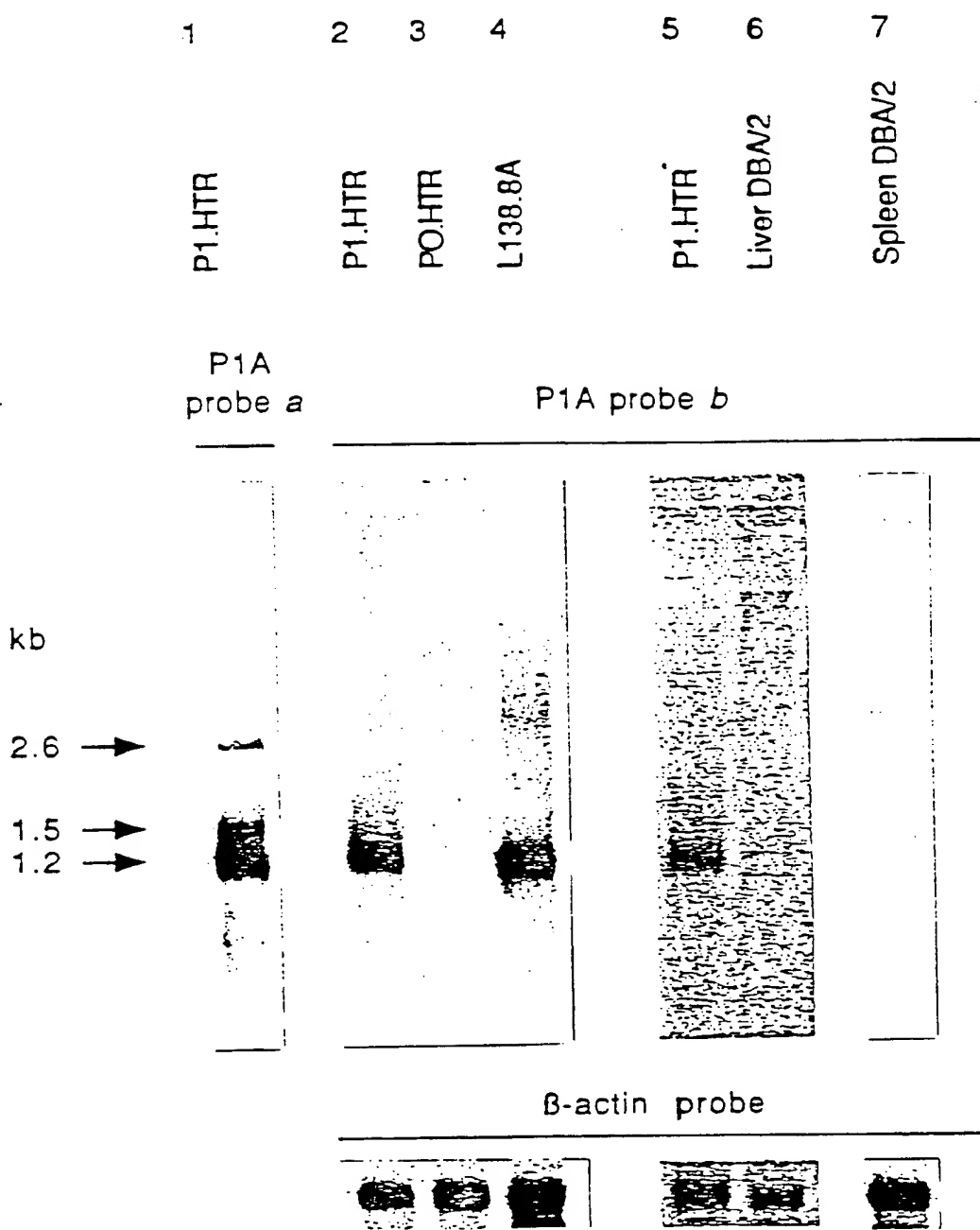


Figure 4

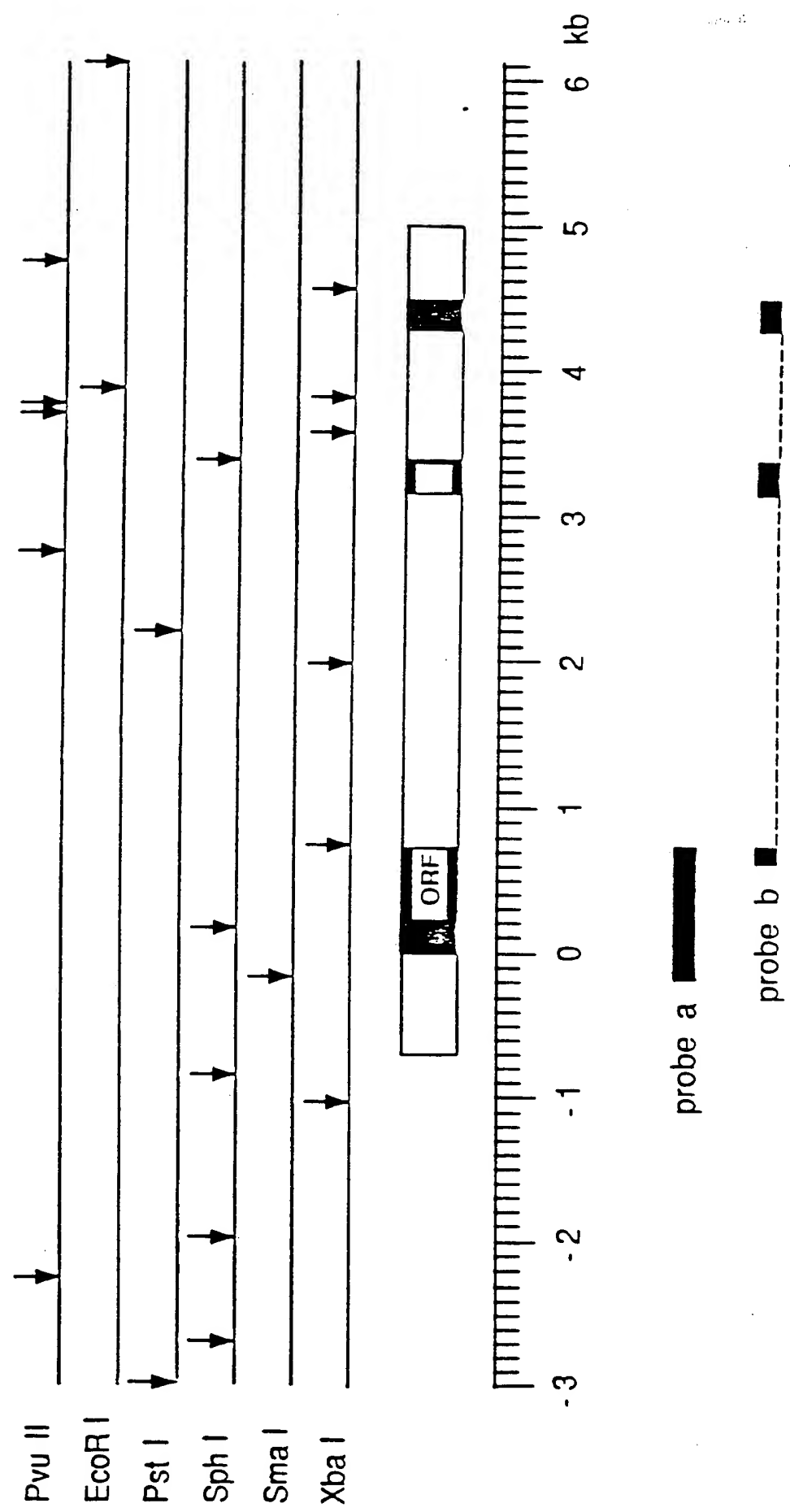


Figure 5

| | | | | | | | |
|------------|------------|------------|------------|------------|------------|------------|------|
| ACCACAGGAG | AATGAAAAGA | ACCCGGGACT | CCCAAAGACG | CTAGATGTGT | GAAGATCCTG | ATCACTCATT | -120 |
| GGGTGTCTGA | GTTCTGCGAT | ATTCATCCCT | CAGCCAATGA | GCTTACTGTT | CTCGTGGGGG | GTTTGTGAGC | -50 |
| CTTGGGTAGG | AAGTTTTGCA | AGTTCCGCCT | ACAGCTCTAG | CTTGTGAATT | TGTACCCTTT | CACGTAAAAA | 19 |
| AGTAGTCCAG | AGTTTACTAC | ACCCTCCCTC | CCCCCTCCCA | CCTCGTGCTG | TGCTGAGTTT | AGAAGTCTTC | 89 |
| CTTATAGAAG | TCTTCCGTAT | AGAACTCTTC | CGGAGGAAGG | AGGGAGGACC | CCCCCCTTT | GCTCTCCCAG | 159 |
| CATGCATTGT | GTCAACGCCA | TTGCACTGAG | CTGGTCGAAG | AAGTAAGCCG | CTAGCTTGCG | ACTCTACTCT | 229 |
| TATCTTAACT | TAGCTCGGCT | TCCTGCTGGT | ACCCTTTGTG | CC | | | 271 |

FIGURE 6a

| | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| ATG | TCT | GAT | AAC | AAG | AAA | CCA | GAC | AAA | GCC | CAC | AGT | GGC | TCA | GGT | GGT | GAC | GGT | GAT | GGG | 59 |
| Met | Ser | Asp | Asn | Lys | Lys | Pro | Asp | Lys | Ala | His | Ser | Gly | Ser | Gly | Gly | Asp | Gly | Asp | Gly | |
| AAT | AGG | TGC | AAT | TTA | TTG | CAC | CGG | TAC | TCC | CTG | GAA | GAA | ATT | CTG | CCT | TAT | CTA | GGG | TGG | 118 |
| Asn | Arg | Cys | Asn | Leu | Leu | His | Arg | Tyr | Ser | Leu | Glu | Glu | Ile | Leu | Pro | Tyr | Leu | Gly | Trp | |
| CTG | GTC | TTC | GCT | GTT | GTC | ACA | ACA | AGT | TTT | CTG | GCG | CTC | CAG | ATG | TTC | ATA | GAC | GCC | CTT | 177 |
| Leu | Val | Phe | Ala | Val | Val | Thr | Thr | Ser | Phe | Leu | Ala | Leu | Gln | Met | Phe | Ile | Asp | Ala | Leu | |
| TAT | GAG | GAG | CAG | TAT | GAA | AGG | GAT | GTG | GCC | TGG | ATA | GCC | AGG | CAA | AGC | AAG | CGC | ATG | TCC | 236 |
| Tyr | Glu | Glu | Gln | Tyr | Glu | Arg | Asp | Val | Ala | Trp | Ile | Ala | Arg | Gln | Ser | Lys | Arg | Met | Ser | |
| TCT | GTC | GAT | GAG | GAT | GAA | GAC | GAT | GAG | GAT | GAT | GAG | GAT | GAC | TAC | TAC | GAC | GAC | GAG | GAC | 295 |
| Ser | Val | Asp | Glu | Asp | Glu | Asp | Asp | Glu | Asp | Asp | Glu | Asp | Asp | Tyr | Tyr | Asp | Asp | Glu | Asp | |
| GAC | GAC | GAC | GAT | GCC | TTC | TAT | GAT | GAT | GAG | GAT | GAT | GAG | GAA | GAA | GAA | TTG | GAG | AAC | CTG | 354 |
| Asp | Asp | Asp | Asp | Ala | Phe | Tyr | Asp | Asp | Glu | Asp | Asp | Glu | Glu | Glu | Glu | Leu | Glu | Asn | Leu | |
| ATG | GAT | GAT | GAA | TCA | GAA | GAT | GAG | GCC | GAA | GAA | GAG | ATG | AGC | GTG | GAA | ATG | GGT | GCC | GGA | 413 |
| Met | Asp | Asp | Glu | Ser | Glu | Asp | Glu | Ala | Glu | Glu | Glu | Met | Ser | Val | Glu | Met | Gly | Ala | Gly | |
| GCT | GAG | GAA | ATG | GGT | GCT | GGC | GCT | AAC | TGT | GCC | TGT | GTT | CCT | GGC | CAT | CAT | TTA | AGG | AAG | 472 |
| Ala | Glu | Glu | Met | Gly | Ala | Gly | Ala | Asn | Cys | Ala | Cys | Val | Pro | Gly | His | His | Leu | Arg | Lys | |
| AAT | GAA | GTG | AAG | TGT | AGG | ATG | ATT | TAT | TTC | TTC | CAC | GAC | CCT | AAT | TTC | CTG | GTG | TCT | ATA | 531 |
| Asn | Glu | Val | Lys | Cys | Arg | Met | Ile | Tyr | Phe | Phe | His | Asp | Pro | Asn | Phe | Leu | Val | Ser | Ile | |
| CCA | GTG | AAC | CCT | AAG | GAA | CAA | ATG | GAG | TGT | AGG | TGT | GAA | AAT | GCT | GAT | GAA | GAG | GTT | GCA | 590 |
| Pro | Val | Asn | Pro | Lys | Glu | Gln | Met | Glu | Cys | Arg | Cys | Glu | Asn | Ala | Asp | Glu | Glu | Val | Ala | |
| ATG | GAA | GAG | GAA | GAA | GAA | GAG | GAG | GAG | GAG | GAG | GAG | GAA | GAG | GAA | ATG | GGA | AAC | CCG | GAT | 649 |
| Met | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Glu | Met | Gly | Asn | Pro | Asp | |
| GGC | TTC | TCA | CCT | TAG | | | | | | | | | | | | | | | | |
| Gly | Phe | Ser | Pro | Amb | | | | | | | | | | | | | | | | |

FIGURE 6b

GCATGCAGTT GCAAAGCCCA GAAGAAAGAA ATGGACAGCG GAAGAAGTGG TTGTTTTTTT 60
TTCCCCTTCA TTAATTTTCT AGTTTTTAGT AATCCAGAAA ATTTGATTTT GTTCTAAAGT 120
TCATTATGCA AAGATGTCAC CAACAGACTT CTGACTGCAT GGTGAACTTT CATATGATAC 180
ATAGGATTAC ACTTGACCT GTTAAAAATA AAAGTTTGAC TTGCATAC 228

FIGURE 6c

cdNA Sequence of gene P1A
 Content of ASCII file : CDNA (cfr Figure 6, parts a,b & c)

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ACCACAGGAG AATGAAAAGA ACCCGGGACT CCCAAAGAGG CTAGATGTGT
GAAGATCCTG ATCACTCATT GGGTGTCTCA GTTCTCCGAT ATTCACTCCT
CAGCCAATGA GCTTACTGTT CTCGTGGGGG GTTGTGAGC CTTGGGTAGG
AAGTTTTGCA AGTTCCGCC TACAGCTCTAG CTTGTGAATT TGTACCCCTT
CACGTAAAAA AGTAGTCCAG AGTTTACTAC ACCCTCCCTC CCCCCTCCCA
CCTCGTGCTG TGCTGAGTTT AGAAGTCTTC CTTATAGAAG TCTTCGSTAT
ACAACCTCTT CCGAGGAAGS AGGGAGGAUC CCCCCCTTT GCTCTCCAG
CATGCATTGT GTCAAAGCCA TTGCACTGAG CTGCTCGAAG AAGTAAGCCG
CTAGCTTGCG ACTCTACTCT TATCTTAACT TAGCTCGGCT TCCTGCTGGT
ACCCCTTGTG CC
ATG TCT GAT AAC AAG AAA CCA GAC AAA GCC CAC AGT GGC TCA
GGT GGT GAC GGT GAT GGG AAT AGG TGC AAT TTA TTG CAC CGG
TAC TCC CTG CAA GAA ATT CTG CCT TAT CTA GGG TGG CTG GTC
TTC GCT GTT GTC ACA ACA AGT TTT CTG GCG CTC CAC ATG TTC
ATA GAC GCC CTT TAT GAG GAG CAG TAT GAA AGG GAT GTG GCC
TGG ATA GCC AGG CAA AGC AAG CGC ATG TCC TCT GTC GAT CAG
GAT GAA GAC GAT GAC GAT GAT GAG GAT GAC TAC TAC GAC GAC
GAG GAC GAC GAC GAC GAT GCC TTC TAT GAT GAT GAG CAT GAT
GAG GAA GAA GAA TTG GAG AAC CTG ATG GAT GAT GAA TCA GAA
GAT GAG GCC GAA GAA GAG ATG AGC GTG GAA ATG GGT CCC GGA
GCT GAG GAA ATG GGT GCT GGC GCT AAC TGT GCC TGT GTT CCT
GGC CAT CAT TTA AGG AAG AAT GAA GTG AAG TGT AGG ATG ATT
TAT TTC TTC CAC GAC CCT AAT TTC CTG GTG TCT ATA CCA GTG
AAC CCT AAG GAA CAA ATG GAG TGT AGG TGT GAA AAT GCT CAT
GAA GAG GTT GCA ATG GAA GAG GAA GAA GAA GAG GAG GAG
GAG GAG GAA GAG GAA ATG GGA AAC CCG GAT GGC TTC TCA CCT
TAG
GCATCCAGTT GCAAAACCCA GAAGAAAGAA ATGGACAGCG GAAGAAGTGG
TTGTTTTTTT TTCCCTTTCA TTAATTTTCT AGTTTTTAGT AATCCAGAAA
ATTTGATTTT GTTCTAAAGT TCATTATGCA AAGATGTAC CAACAGACTT
CTGACTGCAT GGTGAACCTT CATATGATAC ATACCATTAC ACTTGTACCT
GTTAAAAATA AAAGTTTGAC TTGCATAC

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Figure 6d

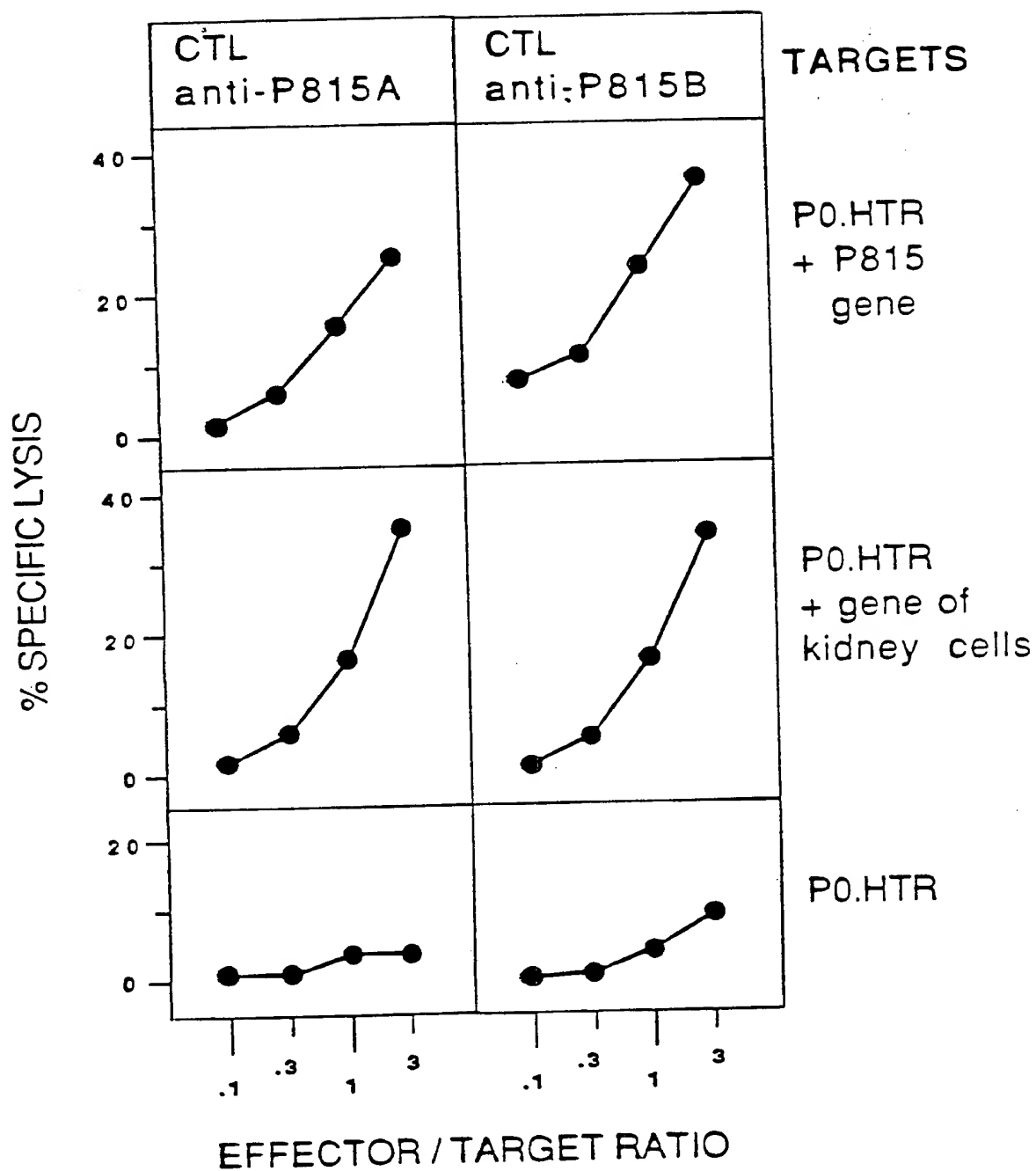


Figure 7

07 728838

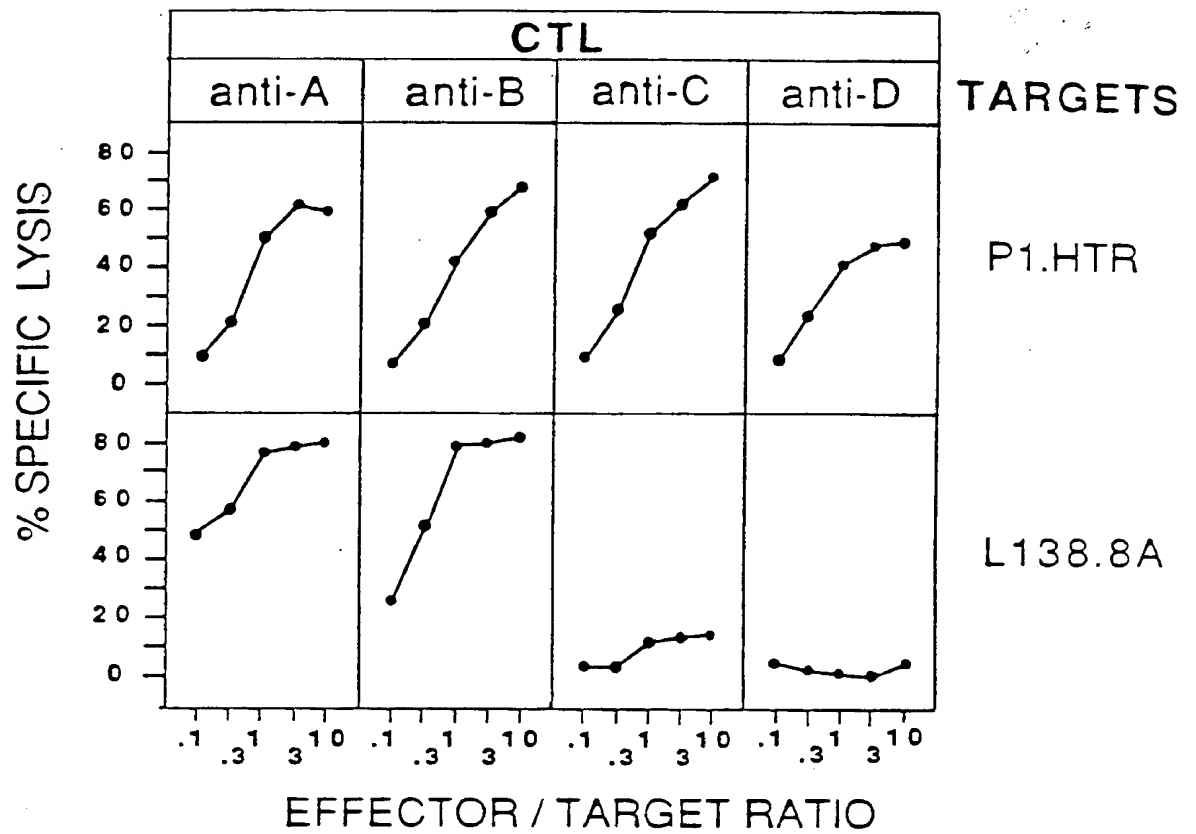


Figure 8

Genomic Sequence of gene P1A
Content of ASCII file : GENOMIC

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CAGCCAATGA GCTTACTGTT CTCGTGGGGG GTTGTGTGAGC CTTGGGTAGG
AAGTTTTGCA AGTTCCGCCT ACAGCTCTAG CTTGTGAATT TGTACCCCTT
CAGGTAAAAA AGTAGTCCAG AGTTTACTAC ACCCTCCCTC CCCCCTCCCA
CCTCGTGCTG TGCTGAGTTT AGAAGTCTTC CTTATAGAAC TCTTCCGTAT
AGAAGTCTTC CGGAGGAAGG AGGGAGGACC CCCCCCTTTT GCTCTCCAG
CATGCATTGT GTCAACGCCA TTGCACTGAG CTGGTCCGAC AAGTAAGCCG
CTAGCTTGCG ACTCTACTCT TATCTTAACT TAGCTGGGCT TCCTGCTGGT
ACCCCTTTGTG CC
ATG TCT GAT AAC AAG AAA CCA GAC AAA GCC CAG AGT GGC TCA
CGT GGT GAC GGT GAT GGG AAT AGG TGC AAT TTA TTG CAC CGG
TAC TCC CTG GAA GAA ATT CTG CCT TAT CTA GGG TGG CTG GTC
TTC GCT GTT GTC ACA ACA AGT TTT CTG GCG CTC CAG ATG TTC
ATA GAC GCC CTT TAT GAG GAG CAG TAT GAA AGG GAT GTG GCC
TGG ATA GCC AGG CAA AGC AAG CGC ATG TCC TCT GTC GAT GAC
GAT GAA GAC GAT GAG GAT GAT GAG GAT GAC TAC TAC GAC GAC
GAG CAC GAC GAC GAC GAT GGC TTC TAT GAT GAT GAG GAT GAT
GAG GAA GAA GAA TTG CAG AAC CTG ATG GAT GAT GAA TCA GAA
GAT GAG GCC GAA GAA GAG ATG AGC GTG GAA ATG GGT GCC GCA
GCT GAG GAA ATG GGT GCT GGC GGT AAC TGT GCC T
GTGAGTAACC CGTGGTCTTT ACTCTAGATT CAGGTGGGGT GCATTCTTTA
CTCTTGCCCA CATCTGTAGT AAAGACCACA TTTTGGTTGG GGGTCATTGC
TGGAGCCATT CCGGCTCTC CIGTCCAGGC CTATCCCCGC TCCTCCCATC
CCCCACTCCT TGCTCCGCTC TCTTTCTTT TCCCACCTTG CCTCTGGAGC
TTCAGTCCAT CCGCTCTGC TCCCTTTCCC CTTTGCTCTC CTTGCTCCCC
TCCCCCTCGG CTCAACTTTT CCGTCCCTCT GCTCTCTGAT CCCCACCTC
TTCAGGCTTC CCGATTGCT CCTCTCCCGA AACCTCCCC TTCTGTTC
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TCACCAGCTT TGCTCTCCCT GCTCCCCCTC CCGTTTTGCA CCTTTCTTTT
TCCTGCTCCC CTCCCCCTCC CCTCCCTGTT TACCTTCAC CGCTTTCTT
CTACCTGCTT CCGTCCCCCT TGCTCTCCC TCCCTATTG CATTTTCGGG
TGCTCTCTCC TCCCCCTCCC CCTCCCTCCC TATTTGCATT TTCGGGTGCT
CCTCCCTCCC CCTCCCCAGG CTTTTTTTT TTTTTTTTT TTTTTTTTTT
TTGGTTTTTC GAGACAGGTT TTCTCTTTGT ATCCCTGGCT GTCCTGGCAC
TCACTCTGTA GACCAGGCTG GCCTCAAACT CAGAAATCTG CCGCTCTG
CCTCCCAAT GCTGGGATTA AAGGCTTGCA CCAGGACTGC CCCAGTGCAG
GCCTTTCTTT TTTCTCTCT CTGGTCTCCC TAATCCCTTT TCTGCATGTT
AACTCCCTT TTGGACCTT TCTTTACAG GACCCCTCC CCGTCTCTG
TTCCCTTCCG GCACCTTCC TAGCCCTGCT CTGTCCCTC TCCCTGCTCC
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GCCCGTTCC CTTTTTTTGT GCCTTTCTCT CTGGCTCCCC TCCACCTTCC
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CCTCTGTGTG CTTTTCTGT TCCCTCCCC TCGCTGGCTC CCGCTCCCTT
TCTGCTTTC CTGTCCCTGC TCCCTCTCT GCTAACCTTT TAATGCTTT
CTTTCTAGA CTCCCCCTC CAGGCTTGCT GTTGTCTCT GTGCACTTTT
CCTGACCTG CTCCCCCTC CCGCTCTCT CCGCTCTCT TTCTCCCAT
CCTTTCTCCA GCGTGTACC CCGCTCTCT ACTCTCTCT CTGCTGCTG
TCTGCTTCC TTTACCTCT CCGCTCTCT ACTCTCTCT TCTTCTCTG
GACTTCTCT CCAGCCGCCC AGTTCCCTGC AGTCCCTGG TCTTCTCTG
CTCTCTGTC ATCACTTCCC CCTAGTTTCA CTTCCCTTT ACTCTCTCT
ATGTGCTCT CTCTCTATCT ATCCCTTCT TTCTGTCCC TCTCTCTGT
CCATCACCTC TCTCTCTCT TCCCTTTCT CTCTCTTCCA TTTCTTCCA
CCTGCTTCTT TACCTTGGCT CTCCCATTC CCGCTTACCT TTATGCCCAT
TCCATGTCCC CTCTCAATTC CCGTCTCCAT TCTGCTCTCT CACATCTTCC

```

Figure 9

ATTTCCCTCT TTCTCCCTTA GCCTCTTCTT CCTCTTCTCT TGTATCTCCC
 TTCCCTTTGC TTCTCCCTCC TCCTTTCCCC TTCCCTCTATG CCCTCTACTC
 TACTTGATCT TCTCTCTCTT CCACATACCC TTTTTCCTTT CCACCTCTCC
 CTTTGTCCTC AGACCTTACA GTATCCTGTG CACAGGAAGT GGGAGGTGCC
 ATCAACAACA AGGAGGCAAG AAACAGAGCA AAATCCCAAA ATCAGCAGGA
 AAGGCTGGAT GAAAATAAGG CCAGGTTCTG AAGACAGCTG GAATCTAGCC
 AAGTGGCTCC TATAACCTTA AGTACCAAGG GAGAAAGTGA TGGTGAAGTT
 CTTGATCCTT GCTGCTTCTT TTACATATGT TGGCACATCT TTCTCAAATG
 CAGGCCATGC TCCATGCTTG GCGCTTGCTC AGCGTGGTTA AGTAATGGGA
 GAATCTGAAA ACTAGGGGCC AGTGGTTTGT TTTGGGGACA AATTAGCAGG
 TAGTGATATT TCCCCCTAAA AATTATAACA AACAGATTCA TGATTTGAGA
 TCCTTCTACA GGTGAGAAGT GGAATAATG TCATATGAA GTTCTTTTA
 GCTAAAGAT ACTTGGAAAC ATAGAAGCGT TGTAAAAATA CTGCTTTCTT
 TTGCTAAAT ATTCTTTCTC ACATATTCAT ATTCTCCAG
 GT GTT CCT GGC CAT CAT TTA AGG AAG AAT GAA GTG AAG TGT
 AGG ATG ATT TAT TTC TTC CAC GAC CCT AAT TGT CTG GTG TCT
 ATA CCA GTG AAC CCT AAG GAA CAA ATG GAG TGT AGG TGT GAA
 AAT GCT GAT GAA GAG GTT GCA ATG GAA CAG GAA GAA GAA GAA
 GAG GAG GAG GAG GAG GAA GAG GAA ATG GGA AAC CCG GAT GGC
 TTC TCA CCT TAG
 GCATGCAGGT ACTGGCTTCA CTACCAACC ATCTCTAACA TATGCCGTGA
 GCTAAGAGCA TCTTTTTTAA AAATATTATT GGTAAACTAA ACAATTGTTA
 TCTTTTACA TTAATAAGTA TTAATTAAT CCAGTATACA GTTTTAAGAA
 CCCTAAGTTA AACAGAAGTC AATGATGTCT AGATGCCTCT TCTTTAGATT
 GTAGTGACAC TACTTACTAC AGATGAGAAG TTGTTAGACT CGGGAGTAGA
 GACCAGTAAA AGATCATGCA GTGAAATGTG GCCATGGAAA TCCCATATTG
 TTCTTATAGT ACCTTTGAGA CAGCTGATAA CAGCTGACAA AAATAAGTGT
 TTCAAGAAAG ATCACACGCC ATGGTTGACA TGCAAAATTAT TATTTTCTCG
 TTCTGATTTT TTTTCAATCT AGACCTGTGG TTTTAAAGAG ATGAAAATCT
 CTTAAAAATT CCTTCATCTT TAATTTTCTT TAACCTTACT TTTTTCCTCT
 TAGAATTCAA TTCAAAATCT TAATTCAATC TTAATTTTAA GATTTCTTAA
 AATGTTTTTT AAAAAAATG CAAATCTCAT TTTTAAAGAGA TGAAAGCAGA
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 GTTCTGGTCT CTGAGAAGCA GTCAGAGAGA ATGGAAAACC AGGCCCTTGC
 CAGTAGGTTA GTGAGGTTGA TATGATCAGA TTATGGACAC TCTCCAAATC
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 AGTTGCAAG CCCAGAAGAA AGAAATGGAC AGCGGAAGAA GTGGTTGTTT
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 TTTTGTCTA AAGTTCAATG TGCAAAGATG TCACCAACAG ACTTCTGACT
 GCATGGTGAA CTTTCATATG ATACATAGGA TTACACTTGT ACCTGTTAAA
 AATAAAAGTT TGACTTGCAT AC

Figure 9 (ctd)

Leu-Leu-His-Arg-Tyr-Ser-Leu-Glu-Glu-Ile-Leu-Pro-Tyr-Leu-Gly-Trp-
Val-Phe-Ala-Val-Val-Thr-Thr-Ser-Phe

Figure 10